```c
#include <stdio.h>
#include <stdlib.h>

int main()
{
    // As we need dynamic array, instead of declaring an array
    // we declare a point which we will dynamically allocate
    int * p;

    // The size of the allocation, which we can get from the user
    int size;

    // Variable to run the loop to scanf/printf values
    int i;

    // Ask the user how many elements are needed.
    printf("How many elements would you like: ");
    scanf("%d", &size);

    // Allocate memory in heap and acquire the address
    printf("Allocating memory of %d elements...\n", size);
    p = (int*) malloc(size * sizeof(int));

    // Extremely important step - check if allocation succeeded
    if ( NULL == p )
    {
        printf("Sorry! Unable to allocate memory\n");
        return 1;   // 1 to 22 indicates failures
    }

    // We successfully allocated memory so now ask the user for input
    for (i=0; i<size; i++)
    {
        printf("Enter value for %d: ", i);
        scanf("%d", &p[i]); // Can we use p+i instead of &p[i] ?
    }

    // Print the array
    printf("Printing values of array...\n\n");
    for (i=0; i<size; i++)
    {
        printf("%d\n", p[i]);   // Can we use *(p+i) instead of p[i] ?
    }

    // Release the allocation back to the heap manager
    free(p);

    // Successfully exit from the program
    return 0;
}

```